

AUG 21 2009

Application Serial No. 10/581,231
Reply to office action of May 21, 2009

PATENT
Docket: CU-4813

REMARKS/ARGUMENTS

Reconsideration is respectfully requested.

Claims 1, 5-7 and 9-10 are pending before this amendment. By the present amendment, claims 1 and 7 are amended. No new matter has been added.

Amendment

Independent claims 1 and 7 have been amended to further include the limitation --the multiple service cross processing unit being adapted to interconnect service signals unmapped by the at least two service processing units, and further adapted to transfer a service signal from the local interface to the service processing unit for mapping and transfer an unmapped service signal from the service processing unit to the local interface--.

Support for such amendment can be found in, for example, page 6 line 22 to page 7 line 8, page 7, line 19 to page 8 line 3 and Figures 3 and 4 of the originally filed specification.

The remaining claims are left unchanged.

Regarding claim rejections – 35 USC § 103

In the non-final office action (page 2), claim 1 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,765,928 (Sethuram et al) in view of newly cited reference U.S. Publication No. 2006/0274734 (DeMartino).

The applicants however respectfully disagree, at least because the added limitation

--the multiple service cross processing unit being adapted to interconnect service signals unmapped by the at least two service processing units, and further adapted to transfer a service signal from the local interface to the service processing unit for mapping and transfer an unmapped service signal from the service processing unit to the local interface--

in claim 1 is neither disclosed nor taught by DeMartino.

Specifically, it seems that the Examiner considers the VDSL interface unit 78 shown in Fig. 6 of DeMartino equivalent to the multiple service cross processing unit as limited in claim 1 of the present application.

As stated above, the multiple service cross processing unit has been further

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clarified as --being adapted to interconnect service signals unmapped by the at least two service processing units, and further adapted to transfer a service signal from the local interface to the service processing unit for mapping and transfer an unmapped service signal from the service processing unit to the local interface--.

Therefore, the multiple service cross processing unit in amended claim 1 can be used to interconnect unmapped service signals between the at least two service processing units, thereby implementing interconnection of different services in a Synchronous Digital Hierarchy (SDH) tributary module, i.e. interconnection of unmapped SDH service signals corresponding to different services. With such a multiple service cross processing unit, a service can be transported from one service processing unit to another.

Besides, the multiple service cross processing unit in amended claim 1 can further be used to transfer both to-be-mapped service signals and unmapped service signals between the local interfaces and the service processing units, and as can be further understood from the above discussion and Figures 3 and 4, the service signals interconnected by the multiple service cross processing unit are all bidirectional.

In sharp contrast, according to the disclosure of DeMartino, the VDSL interface unit 78 receives digital data from its corresponding ADSL interface unit 68 and its corresponding video switching element 74 and sends this data to the subscriber node 24 (lines 6-9 of paragraph 0060; Figure 6), receives upstream data from the subscriber node 24 and sends the data to the ADSL interface unit 68 (lines 24-26 of paragraph 0060; Figure 6), and uses ADSL downstream data and broadcast data to modulate the signal that is transmitted over the twist pair line 32 (lines 27-30 of paragraph 0060; Figure 6).

As can be seen, nowhere in DeMartino's disclosure discloses or teaches that the VDSL interface unit 78 can be used to interconnect the ADSL data and the broadcast data between its corresponding ADSL interface unit 68 and its corresponding video switching element 74. In fact, as can be seen from the arrow line shown between the video switch 74 and VDSL interface 78 in Figure 6 of DeMartino, the video broadcast

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signal is unidirectional, which demonstrates that no interconnection of the ADSL data and the broadcast data is implemented between its corresponding ADSL interface unit 68 and its corresponding video switching element 74.

Besides, nowhere in DeMartino's disclosure discloses or teaches that each of the ADSL data and the broadcast data is mapped or unmapped by a corresponding service processing unit. That is to say, DeMartino does not disclose or teach that the VDSL interface unit 78 transfers mapped or unmapped data.

In addition, DeMartino indicates that the broadcast signal is a receive only signal (page 5 line 4; line 2 of paragraph 0056), i.e. unidirectional (one-way) signal, which is different from the bidirectional service signals of the present invention of amended claim 1.

At least for the reasons presented above, it can be derived that the multiple service cross processing unit as limited in amended claim 1 of the present application is quite different from the VDSL interface unit 78 as disclosed by DeMartino.

Moreover, due to such significant differences between the present application and DeMartino's disclosure, it is respectfully submitted that there is no motivation for one of ordinary skill in the art at the time of the invention to include the VDSL interface unit 78 as taught by DeMartino in the SDH tributary module as claimed in amended claim 1 to interconnect unmapped service signals between the at least two service processing units, and to transfer bidirectional service signals (i.e. both to-be-mapped service signals and unmapped service signals) between the local interfaces and the service processing units.

Based on the above, Applicants respectfully submit that the subject matter of amended claim 1 is non-obvious and thus patentable over Sethuram et al. in view of DeMartino

In the office action (page 4), claims 5 and 6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sethuram in view of DeMartino, and further in view

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of U.S. Patent No. 6,798,779 (Shimbashi et al).

At least because the limitation --the multiple service cross processing unit being adapted to interconnect service signals unmapped by the at least two service processing units, and further adapted to transfer a service signal from the local interface to the service processing unit for mapping and transfer an unmapped service signal from the service processing unit to the local interface-- in amended claim 1 is neither disclosed nor taught by DeMartino, the subject matter of claim 5 that is dependent from claim 1 is non-obvious and thus patentable over Sethuram et al. in view of DeMartino and further in view of Shimbashi et al.

Similarly, the subject matter of claim 6 is dependent from claim 5 and thus claim 6 is non-obvious and thus patentable over Sethuram et al. in view of DeMartino and further in view of Shimbashi et al.

In the office action (page 6), claims 7, 9 and 10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sethuram in view of Shimbashi, and further in view of DeMartino.

For the similar reasons to those presented above with respect to amended claim 1, the subject matter of amended claim 7, which includes limitations corresponding to those in amended claim 1, is non-obvious and thus patentable over Sethuram et al. in view of Shimbashi et al. and DeMartino.

The subject matter of dependent claims 9 and 10 is also non-obvious and thus patentable over Sethuram et al. in view of Shimbashi et al. and DeMartino at least by virtue of their dependencies from amended claim 7.

For the reasons set forth above, the applicants respectfully submit that claims 1, 5-7 and 9-10 pending in this application are in condition for allowance over the cited references. Accordingly, the applicants respectfully request reconsideration and withdrawal of the outstanding rejections and earnestly solicit an indication of allowable


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subject matter.

This amendment is considered to be responsive to all points raised in the office action. Should the examiner have any remaining questions or concerns, the examiner is encouraged to contact the undersigned attorney by telephone to expeditiously resolve such concerns.

Respectfully submitted,

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